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4:14 pm, Feb 23, 2009

Alameda County Environmental Health



76 Broadway Sacramento, California 95818

February 23, 2009

Paresh C. Khatri Alameda County Health Agency 1131 Harbor Bay parkway, Suite250 Alameda, California 94502-577

Re:

Quarterly Summary Report (QSR)—Fourth Quarter 2008

76 Service Station # 7176 RO # 0000482

7850 Amador Valley Blvd.

Dublin, CA

Dear Mr. Khatri:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

Terry L. Grayson Site Manager

Risk Management & Remediation

February 23, 2009

Mr. Paresh Khatri Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Fourth Quarter 2008 - Quarterly Status Report

Fuel leak Case No. R00000482



Dear Mr. Khatri:

On behalf of ConocoPhillips Company (COP), Delta Consultants (Delta) is submitting the *Fourth Quarter 2008 – Quarterly Status Report* for the following location:

#### **Service Station**

#### **Location**

76 Service Station No. 7176

7850 Amador Valley Boulevard Dublin, California

DENNIS SHANNON DETTLOFF No. 7480

Sincerely,

**Delta Consultants** 

Dennis S. Dettloff, P.G.

Senior Project Manager

California Registered Professional Geologist No. 7

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy)

# FOURTH QUARTER 2008 Quarterly Status Report 76 Service Station No. 7176 7850 Amador Valley Road Dublin, California

#### **PREVIOUS ASSESSMENT**

November 1994 - Unocal Corporation (Unocal) replaced the fuel underground storage tanks (USTs), removed the used-oil UST and associated product piping, and removed the oil/water separator. No holes or signs of leakage were observed in the fuel USTs, however, eight holes up to 0.5-inches in diameter were observed in the used oil UST.

October 1995 - Six soil borings (B1 through B6) and three on-site monitor wells (U1 through U3) were installed.

<u>March 1998</u> - Tosco Marketing Company (Tosco, now ConocoPhillips) conducted an offsite soil and groundwater investigation that included the installation of two off-site groundwater monitoring wells (MW4 and MW5).

<u>August 2000</u> - A <u>Request and Work Plan for Case Closure</u> was submitted that presented results of a groundwater receptor survey, risk-based corrective action Tier II analysis and requested environmental closure. No active groundwater production wells were positively identified within the survey radius during the agency and field groundwater receptor surveys.

June 2001 - The Addendum to Request and Work Plan for Case Closure was completed.

November 2004 – Four soil borings (SB-1 through SB-4) were advanced. The site data is documented in the December 10, 2004 *Limited Phase II Environmental Site Assessment* report. Based on the report of findings, residual concentrations of total petroleum hydrocarbons as diesel (TPHd) (7.1 mg/kg) were reported in the vicinity of SB-3. Dissolved hydrocarbon concentrations were reported in each soil boring with the exception of SB-4. Maximum concentrations were reported as follows: TPHd [1,100 micrograms per liter ( $\mu$ g/L) in SB-1], total petroleum hydrocarbons as gasoline (TPHg) (9,700  $\mu$ g/L in SB-3) and methyl tertiary butyl ether (MTBE) (3.0  $\mu$ g/L in SB-1). Benzene was not reported above the laboratories indicated reporting limit of 2.5  $\mu$ g/L.

January 2005 - ATC became the new site lead consultant.

<u>September 2005</u> – Site environmental consulting responsibilities were transferred to Delta Consultants.

#### **SENSITIVE RECEPTORS**

<u>July 2007 – Delta conducted a sensitive receptor survey</u> to identify all water supply wells within a one-mile radius of the site and sensitive receptors within 1,000 feet from the site. Using the DWR well logs, a total of 28 water supply wells were identified as being within a one-mile radius of the subject site. The closest down-gradient well is a cathodic protection well located approximately 0.8 miles southeast of the site. The

closest water supply well is a domestic well located approximately 0.4 miles southwest of the site. No water bodies, schools, daycare centers, hospitals, or churches acting as a potential school or daycare facilities were identified within the survey area.

#### **GROUNDWATER MONITORING AND SAMPLING**

This site is monitored and sampled on a semi-annual basis during the first and third quarters. Groundwater analytical results presented below are from the most recent, third quarter 2008, event. Samples collected from the monitoring wells are analyzed for TPHd by Environmental Protection Agency (EPA) Method 8015M, total purgeable petroleum hydrocarbons (TPPH), benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and MTBE, di-isopropyl ether (DIPE), tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB) and ethanol by EPA Method 8260. TRC has been retained to perform the monitoring and sampling.

During the third quarter 2008 groundwater monitoring and sampling event, conducted on September 2, 2008, depth to groundwater ranged from 16.97 feet (U-1) to 19.32 feet (U-3) below top of casing (TOC). The groundwater flow direction was interpreted to be to the southeast with a gradient of 0.004 foot per foot (ft/ft). Historic groundwater flow directions are shown on a rose diagram presented as Attachment B. Monitoring well MW-5 was not monitored or sampled; it is reported as paved over.

#### **Contaminants of Concern:**

- **TPPH:** TPPH was above the laboratory's indicated reporting limit the groundwater samples collected and submitted for analysis from monitoring wells MW-4, U-1, and U-2 at concentrations of 380  $\mu$ g/L, 3,300  $\mu$ g/L, and 1,500  $\mu$ g/L, respectively during the third quarter 2008 event.
- Benzene: Benzene was below the laboratory's indicated reporting limits in each
  of the groundwater samples collected and submitted for analysis from the
  monitoring wells during the third quarter 2008 event.
- MTBE: MTBE was above the laboratory's indicated reporting limit the groundwater samples collected and submitted for analysis from monitoring wells MW-4 and U-2 at concentrations of 0.70 µg/L and 0.80 µg/L, respectively during the third quarter 2008 event.

During the third quarter 2008 event, ethyl-benzene was above the laboratory's indicated reporting limit in the groundwater samples collected and submitted for analysis from monitoring wells U-1 and U-2 at concentrations of 1.4  $\mu$ g/L and 0.73  $\mu$ g/L, respectively during the current event. TPHd was above the laboratory's indicated reporting limit in the groundwater samples collected and submitted fro analysis from monitoring wells MW-4, U-1, and U-2 at concentrations of 51  $\mu$ g/L, 960  $\mu$ g/L, and 300  $\mu$ g/L, respectively during the third quarter 2008 event. All other constituents were below the laboratory's indicated reporting limits in each of the groundwater samples collected and submitted for analysis from the monitoring wells during the September 2008 monitoring and sampling event.

#### **REMEDIATION STATUS**

Approximately 5,000 gallons of groundwater were removed from the fuel UST excavation during the 1994 UST replacement activities. A total of 15,511 gallons of groundwater have been removed historically from the site through periodic groundwater purging of the UST cavity. Approximately 1,863 tons of hydrocarbonimpacted soil were excavated and removed from the site during the 1994 UST replacement activities.

Active remediation is currently not being conducted at the site.

#### **CHARACTERIZATION STATUS**

Petroleum hydrocarbon concentrations in the groundwater are limited to an area surrounding the UST cavity and dispenser islands.

Contaminants of concern benzene and MTBE are not present above State of California drinking water standards. Analytical data collected during the most recent groundwater monitoring and sampling event indicate that MTBE concentrations in the groundwater are below the Secondary Maximum Contaminant Level (MCL) of 5.0  $\mu$ g/L. Benzene concentrations are below the laboratory's indicated reporting limit.

Based on the data collected during groundwater monitoring and sampling activities at the site it appears that TPHg and TPHd concentrations in the groundwater are stable or decreasing.

In addition, the groundwater gradient at the site is, on average, 0.005 ft/ft. This is relatively flat and indicates that the petroleum hydrocarbon plume is not likely to migrate far off-site.

#### **REQUEST FOR CLOSURE REVIEW**

Based on the summary of analytical data, on April 25, 2008 Delta requested to Mr. Barney Chan that the site be evaluated for No Further Action. To further support a finding of low-risk and closure applicability, Delta has completed an updated sensitive receptor survey (SRS) for this site dated July 24, 2007 (the last SRS was conducted in August of 2000).

The findings of the SRS indicated that no sensitive receptors present are at risk due to remaining petroleum hydrocarbons beneath the site, site closure is requested to be approved.

#### RECENT CORRESPONDENCE

No correspondence were sent or received during the fourth quarter 2008.

#### **FOURTH QUARTER 2008 ACTIVITIES**

1. On October 27, 2008, Delta submitted the Semi-Annual Summary Report – Third Quarter 2008 through Fourth Quarter 2008.

### **Fourth Quarter 2008 – Quarterly Status Report** 76 Service Station No. 7176

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#### **WASTE DISPOSAL SUMMARY**

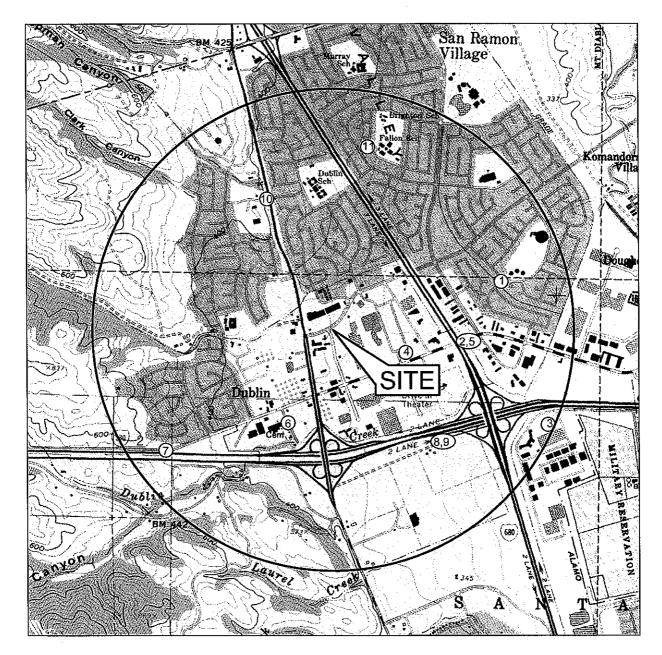
No waste was disposed of from the site during this reporting period.

#### **FIRST QUARTER 2009**

**1.** TRC will conduct semi-annual groundwater monitoring and sampling activities at the site.

**CONSULTANT:** Delta Consultants

## Attachment A Site Locator Sensitive Receptor Map



0 1000 FT 2000 FT SCALE: 1 : 24,000



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, DUBLIN QUADRANGLE, 1967



#### FIGURE 2

SITE LOCATOR SENSITIVE RECEPTOR MAP

76 STATION NO. 7176 7850 AMADOR VALLEY BOULEVARD DUBLIN, CALIFORNIA

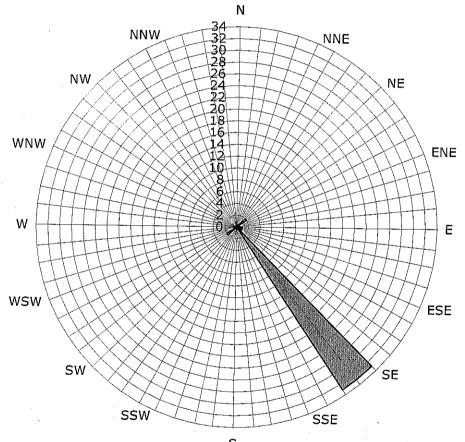
	PROJECT NO.	DRAWN BY
	C107-176	JH 12/12/06
	FILE NO.	PREPARED BY
ļ	Site Locator 7176	JH
	REVISION NO.	REVIEWED BY



### Attachment B Historic Groundwater Flow Directions

#### Historic Groundwater Flow Directions ConocoPhillips Site No. 7176

7850 Amador Valley Boulevard Dublin, California



Legend Concentric circles represent quarterly montoring events Fourth Quarter 1995 through Third Quarter 2008 39 data points shown